

# Introduction Guide

**NOKIA**  
**112T**  
Mediamaster

**NOKIA**  
**120T**  
Mediamaster



**NOKIA**  
CONNECTING PEOPLE

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# Mediamaster 112 T & 120 T

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This Introduction Guide describes how to connect the Mediamaster and how to perform the first-time installation. It also describes the main features of the product.


A more detailed User Guide in the English language is available from the [Nokia.com](http://Nokia.com) support pages on the Internet.

### Read this before using the Mediamaster

- Do not use any power supply other than the original unit delivered with the Mediamaster.
- Allow 10 cm of space around the Mediamaster for sufficient ventilation.
- Do not cover the Mediamaster's ventilation openings with items such as newspapers, tablecloths, curtains, etc.
- Do not place the Mediamaster on top of a heat-emitting unit.
- Do not place naked flame sources, such as lit candles, on the Mediamaster.
- Use a soft cloth and a mild solution of washing-up liquid to clean the casing.
- Do not expose the Mediamaster to the dripping or splashing of liquids.
- Do not place any objects filled with liquids, such as vases, on the Mediamaster.
- To give your Mediamaster extra protection, e.g. during a thunderstorm, we recommend that you connect it via an external surge protection device.
- Do not connect or modify cables when the Mediamaster is plugged in.
- Do not remove the cover.
- Do not allow the unit to be exposed to hot, cold or humid conditions.
- Service should only be carried out at a Nokia Authorised Service Centre.
- Please note that the only way to isolate the Mediamaster completely from the mains supply is to unplug the power supply!

# Remote control

This section describes how to operate the Mediamaster using the buttons on the remote control.

<b>mute</b> 	Press once to turn the sound off/on (mute/unmute). <b>Press and hold for a few seconds to switch the Mediamaster into standby mode. In addition, press this button to switch the Mediamaster on.</b>
<b>ok</b>	To confirm a selection. To open Navi Bars
<b>cursor up</b> ▲	Move up in the menus and change to the next channel in viewing mode.
<b>cursor down</b> ▼	Move down in the menus and change to the previous channel in viewing mode.
<b>cursor left</b> ◀	Move left/change settings in menus. Decrease the volume level in viewing mode.
<b>cursor right</b> ▶	Move right/change settings in menus. Increase the volume level in viewing mode.
<b>opt</b>	To display temporary settings (options) while watching TV. Activate Channel Filtering & Sorting in Navi Bars mode.
<b>info</b>	Three different functions: Pressing once will show current programme name. Pressing twice will show information about the current and next programme. Pressing three times will give the 7-day programme guide (EPG).
<b>back</b>	To go back one level at a time within menus. To close the Navi Bars. Toggle between the current and previous channel.
<b>0 - 9</b>	To change the channel and to select individual menu options. NOTE: If 0 is entered as the first digit, the TV Release functionality is activated (see below).
<b>0</b>	To toggle between the Mediamaster reception, or any other reception and your TV (depending on the TV model.)
<b>navi</b>	To open and close the Navi Bars.
<b>txt</b>	Press to enter Teletext (if available).
<b>tv/radio</b>	Toggle between TV and radio mode.



# Connecting the Mediamaster

## Front and Rear panel

### TV aerial

for connection of the antenna.

Also, a Nokia active indoor antenna is powered from this connection \*

Reset button

### Slot

112 T = for a Viaccess smart card

120 T = for a Conax smart card

### TV SCART socket \*\*

for connection to the TV SCART

### DC in

for connecting the cable from the external power supply

### TV/VCR

For connecting to the RF socket on the TV, or to a Video recorder

### Digital audio

Digital audio output (TOS-link optical connection)



**\* IMPORTANT. PLEASE SEE INFORMATION ON PAGE 9 ON HOW TO SWITCH OFF THE ANTENNA POWER.**

A constant green light indicates that the Mediamaster is switched ON.

A constant red light indicates standby mode.

The light flashes red when commands from the remote control are received.

The light flashes green during software updates.

## Connecting the Mediamaster

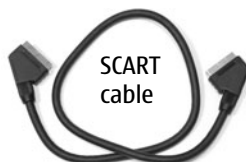
The box for your Mediamaster should contain the following items:

- the Mediamaster
- a remote control with 2 AAA batteries
- a SCART cable (fully connected; 1.0 m)
- an Introduction Guide
- a separate power supply

### Power supply



### SCART cable



## Preparing the remote control

- Remove the cover from the battery compartment at the bottom of the remote control.
- Insert the 2 AAA (1.5 V) batteries as shown in the diagram, taking care to observe the + and - markings indicated inside.
- Replace the cover.

### \* \* The TV SCART Socket

When you connect other devices to this socket, always **use a fully connected** SCART cable like the one supplied. There are SCART cables available that do not have all the pins connected, which could reduce picture quality if you were to use them.



# Connecting the Mediamaster

## Common Connections

In this section, you will see some of the most **common** ways to connect your equipment.

If you have problems with your connections and need help, contact **your retailer or Nokia Support**.

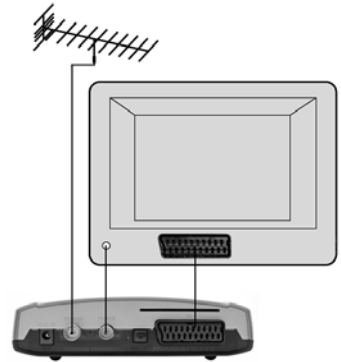
## Connecting to the TV with SCART

- Connect the antenna cable to the TV aerial input on the Mediamaster.
- Connect an RF cable from the TV/VCR output on the Mediamaster to the antenna input socket on the TV.
- Connect a SCART cable between the main SCART socket on the TV and the TV SCART socket on the Mediamaster.
- Switch on your TV, then plug in and switch on your Mediamaster.

**You may need to select the AV (SCART) channel on your TV to watch digital TV. In some cases, your TV will automatically select this channel when the Mediamaster is switched on.**

**NOTE: The RF lead will need to be connected in order to watch analogue channels (the old 1, 2, 3, 4, 5)**

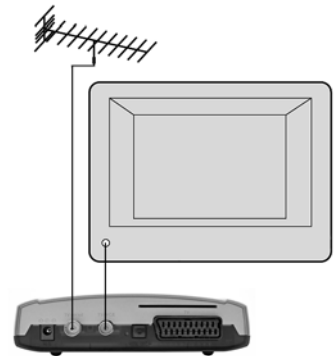
**It is always advisable to consult the user guide that came with your TV.**



## Connecting to the TV without SCART

- Remove the aerial lead from your TV and connect this to the TV aerial input socket on the Mediamaster.
- Connect an RF cable from the TV/VCR output on the Mediamaster to the RF input socket on the TV.
- Switch on your TV, plug in and switch on your Mediamaster.
- Select a programme number on the TV that is not currently used for other TV channels.
- Follow the instructions in your TV manual to tune the TV to the channel where you see the First-time installation menu from the Mediamaster.
- Follow the instructions in your TV manual to store this channel.
- When the First-time installation menu is visible, press the **ok** button on the Mediamaster's remote control to start the installation procedure.

If the picture quality is bad, you can later change the pre-defined UHF channel 43 to any other number between 21 and 69. You will also have to tune your TV to the same (= the new) channel number.



# Connecting the Mediamaster

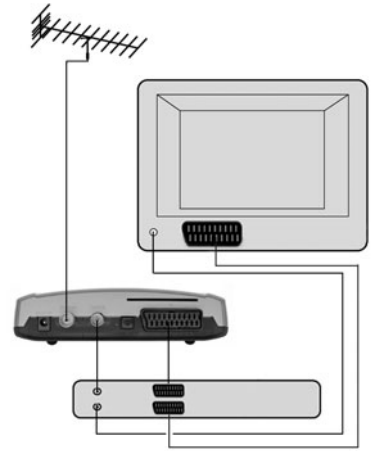
## Connecting a Video recorder with SCART

- Remove the aerial lead from your TV and connect this to the TV aerial input socket on the Mediamaster.
- Connect a SCART cable between the main SCART socket on the TV and the TV SCART socket on the Video.
- Connect an RF cable from the TV/VCR output on the Mediamaster to the RF input socket on the video.
- Connect an RF cable from the TV/VCR output on the video to the RF input socket on the TV.
- Connect a SCART cable between the SCART socket on the video and the SCART socket on the Mediamaster.
- Switch on your TV, then plug in and switch on your Mediamaster.
- On your VCR, there should be an AV select button. This mode should be selected to record digital TV.

**You may need to select the AV (SCART) channel on your TV. In some cases, your TV will automatically select this channel when the Mediamaster is switched on.**

**NOTE: In this set-up, your VCR has to be switched on or in standby mode to watch digital TV. To record a digital channel, you will need to select the AV (SCART) channel on your video.**

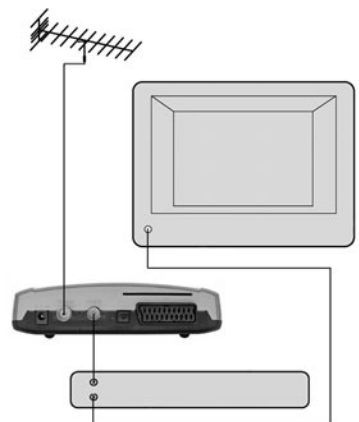
**It is always advisable to consult the user guides that came with your video and TV.**



## Connecting a Video recorder without SCART

- Remove the aerial lead from your TV and connect it to the TV aerial input socket on the Mediamaster.
- Connect an RF cable from the TV/VCR output on the Mediamaster to the RF input socket on the video.
- Connect an RF cable from the TV/VCR output on the video to the RF input socket on the TV.
- Switch on your TV, then plug in and switch on your Mediamaster.
- Pick a spare channel on your VCR and tune this until you see a programme channel from the Mediamaster. Store this channel.

Select this channel on your video when you want to record a digital channel.



# Connecting the Mediamaster

## About Smart card

The **112 T** Mediamaster is equipped with a built-in decoder for the **Viaccess encryption system**.

The **120 T** Mediamaster is equipped with a built-in decoder for the **Conax encryption system**.

Insert a valid **smart card** fully into the slot on the back of the Mediamaster. The gold chip must face **downwards and inwards**.



## Connecting a Hi-fi system

It is possible to connect a TOS link cable from the Digital audio output on the Mediamaster to a Hi-fi system that is equipped with the corresponding audio input.

- Also use the TOS link Digital audio output for connection to an external Dolby digital/DTS decoder.

## About digital transmission

Digital Radio and TV signals can be blocked by buildings, mountains and the surrounding terrain. Depending on whether the receiver is located in a valley, behind a mountain or in a concrete building, the quality of reception may vary considerably.

As with most other transmissions, bad weather affects reception quality.

## Connecting to the TV aerial

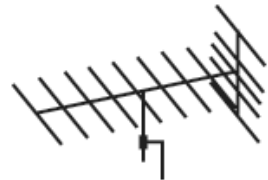
You can connect the Mediamaster to the following types of aerials:

### 1. Standard outdoor aerial

Where possible, use an outdoor roof aerial intended for receiving UHF/VHF channels (21-69).

Please note the following:

- In some blocks of flats, the roof-mounted aerial system includes a filter and channel selector. If so, the aerial may not work with the Mediamaster. Please consult your landlord.
- Many older roof-mounted aerials may only receive a limited number of channels, which results in it being difficult or even impossible to receive digital channels transmitted on higher frequencies. This problem can be solved by replacing the roof aerial.





# Connecting the Mediamaster & First-time installation

- Some outdoor aerials are directed towards an analogue transmitter. The aerial must be directed towards a digital TV transmitter.
- It is not always advisable to position the aerial as high as possible. If problems arise, experiment with different aerial heights.

## 2. Indoor and window-mounted aerials

This type of aerial may be enough if the reception conditions are very good. When an indoor aerial is used, please note the following:

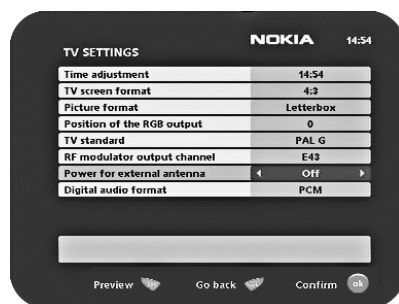
- Use an aerial for UHF/VHF channels (21-69), e.g. a directional aerial.
- Place the aerial by the window and direct it towards the TV transmitter, if possible.
- It is recommended that you use a Nokia active aerial with a built-in amplifier to provide a stronger signal.

The strength of the TV signal varies according to reflections from, for example, buildings. The signal penetrates thick stone or concrete walls poorly. A wooden building, however, is not an insurmountable barrier for digital TV signals.

### The 5 V power for the active antenna

The Nokia active indoor antenna must be powered with 5 V from the TV aerial connector on the rear of the Mediamaster.

If your Mediamaster is connected to a local antenna system, e.g. in a rented flat, the 5 V power might disturb the antenna system in the building when it is switched ON. You can switch OFF the 5 V from the TV menu.



## First-time installation general information

Once you have correctly connected the Mediamaster, you will also have to perform a "First-time installation." During this procedure, helpful information is displayed at the bottom of the menus.

The **ok** button always **confirms** a selection within these menus, and pressing it will take you to the next step in the installation process. However, sometimes more than one value has to be entered in a menu. Make all the necessary changes first.

Then, confirm them all simultaneously by pressing **ok**.

- You can always go back to the previous menu by pressing **back**.
- Use the **cursor up/down** buttons ▲▼ to move upwards and downwards from one line to another.
- Use the **cursor left/right** buttons ◀▶ to change settings.
- Use the number buttons on the remote control to enter numeric values.

# First-time installation

## Switching on for the first time and start

- Plug in your Mediamaster and the "First-time installation" menu is shown.
- Press **ok** to continue with the channel search.



The menu will be shown as long as the Mediamaster is searching for TV and radio channels.

All channels found will be listed on the screen.

NOTE: the search procedure may take a few minutes. You can cancel the search at any time by pressing **ok**.



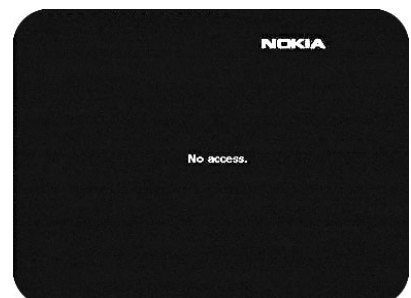
When the search procedure has ended, a message will tell you how many TV and radio channels have been found.

- Press **ok** to start watching digital TV channels.



If no TV channel is automatically shown after you have finished the installation procedure;

- Step up or down with the ▼▲ buttons to select another channel.



# Watching TV & listening to the radio

## Navigating with the Navi Bars

Navi Bars are used for selecting TV/Radio channels and to enter menus in which you can perform different settings.

1. Display Navi Bars by pressing the **navi** or **ok** button; to hide them, press the **back** button.
2. When Navi Bars are displayed, you can move the folders in horizontal and vertical directions with the **▼▲◀▶** cursor buttons.

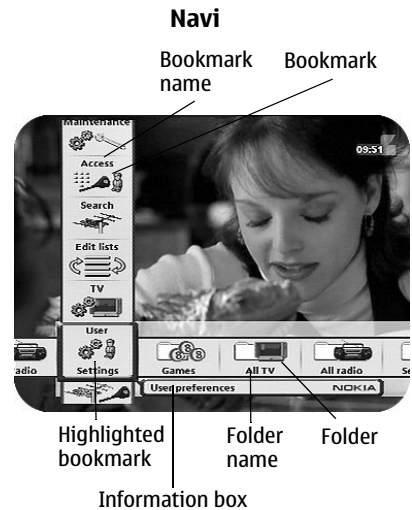
The horizontal row contains **folders**, e.g. All TV, All Radio and the Settings folders. Each folder contains one or more **bookmarks**.

- To move a folder into focus, use the **◀▶** buttons.
- When a folder is in focus the bookmarks will be shown in the vertical row.
- You select a bookmark using the **▼▲** buttons.
- To confirm the selection of, for example, a TV channel or to open a bookmark, press the **ok** button.

Below the horizontal folder bar, there is an Information box for the currently highlighted bookmark.

When scrolling through TV or radio channels, the programmes can be marked with the following symbols in the Information box:

- \* = a new channel you have not yet visited
- ⊗ = the channel is locked by the user
- ⊙ = the channel is encrypted



## The Menus in the Settings folder

From the Settings folder in the Navi Bar you have access to different bookmarks containing Menus.

In the figure to the right, the Settings folder with the **User** bookmark is in focus.

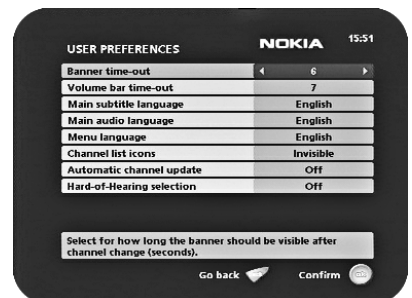
When you try to open some of the menus contained in the folders you will be asked to enter an access code. This code is pre-set to 1234 in the factory.

Press **ok** to open the User Menu.

Press **info** to get some information about the Settings folder currently in focus.



From the Menus you can make different settings that will affect the performance of the Mediamaster. For example, in the User Preferences Menu shown in the figure to the right you can change settings for the Banner time-out, Volume bar time-out and so on. At the bottom part of each menu you get some useful information about what will be affected.



# Watching TV & listening to the radio

## Edit lists folder

The TV folder may contain a lot of channels. By creating your own lists you can make it easier to handle channels.

You can create and edit favourite channel lists in these menus.

### Select list

If you have several lists and want to make changes to them, select which list you want to change by using the ◀▶ buttons.

### Create list

Create your own lists containing the channels you most frequently watch. Give each list a specific name, e.g. "News" or "Kids". The new lists you create will appear as a new **folder** in the horizontal part of the Navi Bars.

When a list is selected, you see only those channels defined in the list.

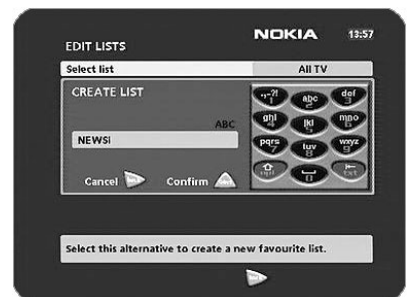
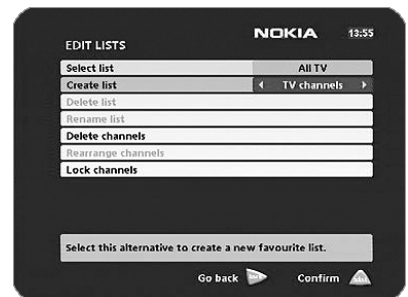
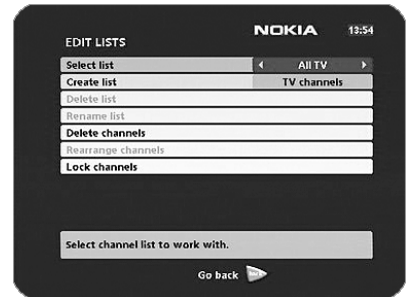
You can create separate lists for TV and radio channels.

### Enter the name of a list

- Press the number button corresponding to the character you want: once for the first character, twice for the second and so on.
- Before entering the next character, wait for the short automatic delay before the cursor moves to the next character position.
- The available characters are listed below:

1	*#&%=:!;-+~/\$@^1	6	m n o 6 Ö Õ Ñ Ó Ò
2	a b c 2 Ä Å Á Â Ã Ä Å	7	p q r s 7 \$
3	d e f 3 É Ê Ë Ì	8	t u v 8 Ù Ú Û
4	g h i 4 Î Ï Ñ Ò	9	w x y z 9
5	j k l 5	0	space and 0

- Toggle between upper-case and lower-case letters with **opt**.
- To insert a space, press the number button **0**.
- If you make a mistake, you can remove characters by pressing **txt** as many times as needed.
- When you have entered the list name, press **ok**.
- Go to "Add/Delete Channels" to add channels to the list.



# Watching TV & listening to the radio

## Delete selected list

If you want to completely delete a list, first select the list with the ◀▶ buttons on the line "Select list". Then, move down to "Delete selected list" and press **ok**.

## Rename selected list

Give the list a new name. Refer to "Create list" on the previous page.

## Add/Delete channels

From this menu, you add and remove the channels in your lists.

A channel is added or removed from the list by pressing **info**. The square on the right-hand side of a line will be empty to denote a deleted channel, and will contain an "✓" for added channels. Three different symbols can be shown next to the channel name:

✱ for a new channel that you have not previously visited, ⊗ for a channel locked by the user and ⊕ for an encrypted channel.

- Move to the desired channel(s) with the ◀▶ buttons.
- Press **opt** if you want to preview the channel.
- Add/remove a channel by pressing **info**.
- When you are ready, confirm the selections and exit the menu by pressing **ok**.

## Rearrange channels

This lets you arrange the order of the channels within your lists.

- With the ▶ button, mark the channel you want to move to a new position.
- Move the channel to the desired position with the ▲▼ buttons,
- then press the ◀ button.
- Press **ok** to confirm the new position.

## Lock channels

To open this menu, you will be asked to enter your access code.

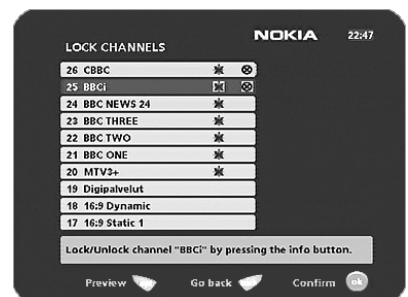
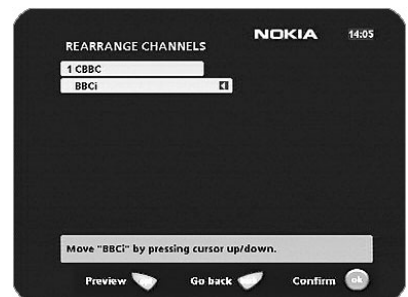
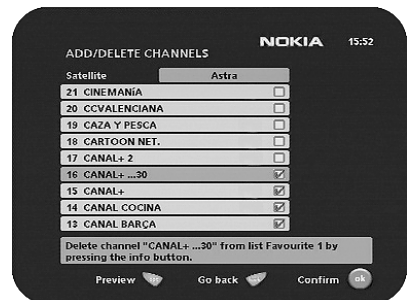
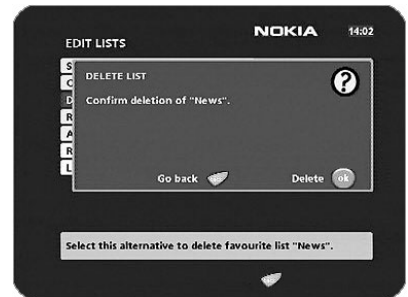
**The access code is set to 1234 at the factory.**

You can lock (and later unlock) channels on any of the lists in order to prevent your children from watching them, etc.

- Select the channel you want to lock and press **info**. Repeat the procedure for each channel you want to lock.
- Press **opt** if you want to preview the channel.
- Press **ok** to confirm.

A locked channel will be marked with an "⊗" symbol.

- You must enter your access code before you can watch a locked channel.



# Watching TV & listening to the radio

## Sorting channels

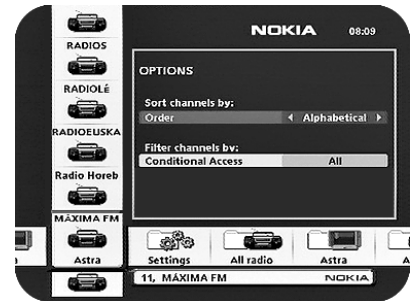
You can select how the channels will be sorted in the All TV and All Radio folders.

When any of the TV or Radio folders are in focus in the Navi Bars, press the **opt** button on the remote control.

- Select to show the channels in **alphabetical** or **numerical** succession in the folders.
- Select the channel names that you want to be shown in the TV/ Radio folders.

**Free** channels = Only channels that do not need a smart card to be watched.

**All** channels = Smart card dependent channels + free channels.



Note! Sorting does not apply for Favourite folders.

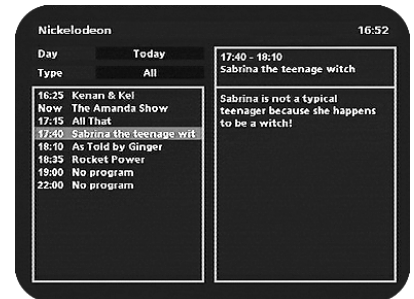
## Programme Guide: EPG

By pressing the **info** button **three times** while watching a channel you get access to the Mediamaster EPG (Electronic Programme Guide.)

In the EPG you will find information about the programmes for the current day and for the following seven days (provided that this information is included in the channel transmission from the distributor.)

You may also select the Type of programme you want information about, e.g. Movie, Sports or Music.

Use the **arrow** buttons to navigate within the guide. Exit the guide by pressing the **info** or **back** button.



# Nokia Mediamaster software end-user license

**IMPORTANT: READ THE NOKIA CORPORATION, NOKIA HOME COMMUNICATIONS END-USER SOFTWARE AGREEMENT CAREFULLY BEFORE USING THE SOFTWARE**

This Software Agreement ("Agreement") is between You (either an individual or an entity), the End User, and Nokia Corporation, Nokia Home Communications ("Nokia"). The Agreement authorizes You to use the Software specified in Clause 1 below and which is included in this Nokia digital TV receiver. This is an agreement on end-user rights and not an agreement concerning sale.

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5. **COMMENCEMENT & TERMINATION.** This Agreement is effective from the first date You use this Nokia digital TV receiver. You may terminate this Agreement at any time by returning, at Your own costs, this Nokia digital TV receiver, and all related materials provided by Nokia. Your end-user rights automatically and immediately terminate without notice from Nokia if You fail to comply with any provision of this Agreement. In such an event, You must immediately return at Your own cost, this Nokia digital TV receiver, and all related material to the place of purchase.

6. **NO OTHER OBLIGATIONS.** This Agreement creates no obligations on the part of Nokia other than as specifically set forth herein.

7. **LIMITATION OF LIABILITY.** TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL NOKIA, ITS EMPLOYEES OR LICENSORS OR AFFILIATES BE LIABLE FOR ANY LOST PROFITS, REVENUE, SALES, DATA, OR COSTS OF PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES, PROPERTY DAMAGE, PERSONAL INJURY, INTERRUPTION OF BUSINESS, LOSS OF BUSINESS INFORMATION, OR FOR ANY SPECIAL, DIRECT, INDIRECT, INCIDENTAL, ECONOMIC, COVER, PUNITIVE,

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9. **CONTACT DETAILS.** If You want to contact Nokia in respect of this Agreement, contact Nokia at the following address:

Nokia Home Communications  
Itämerenkatu 11-13  
00180 Helsinki  
FINLAND

## 10. APPLICABLE LAW & GENERAL PROVISIONS.

This Agreement is governed by the laws of Finland. All disputes arising from or relating to this Agreement shall be settled by a single arbitrator appointed by the Central Chamber of Commerce of Finland. The arbitration procedure shall take place in Helsinki, Finland in the English language. If any part of this Agreement is found void and unenforceable, it will not affect the validity of the balance of the Agreement, which shall remain valid and enforceable according to its terms. This Agreement may only be modified in writing by an authorized officer of Nokia. This is the entire agreement between Nokia and You relating to the Software, and it supersedes any prior representations, discussions, undertakings, end-user agreements, communications, or advertising relating to the Software.

# Technical specifications

## Transmission Standards DVB, MPEG 2

### RF Input Modulator Output

Input/output connector	IEC female / IEC male
RF input frequency	174-300 MHz & 474-862 MHz
RF input power level	78 to -30 dBm
RF impedance	75 $\Omega$
Frequency range	Loop through 47-862 MHz
Supported TV systems	PAL B/G, I and SECAM
Frequency range	RF modulator 471, 25-855, 25 MHz
Output channel	CH 21-69
Preset channel	43
Output signal	PAL I, G and SECAM
Demodulation	OFDM 2 k and 8 k, QPSK

### TV SCART

Video output	1 Vpp ( $\pm 1$ dB) / 75 $\Omega$
Audio output	0.5 Vrms / RL >10 k $\Omega$
RGB output	Internal RGB
RGB bandwidth	5.8 MHz $\pm 3$ dB
Fast blanking output	Internal
Status output	0/6/12 V / RL >10 k $\Omega$

### Front panel

One LED indicator

### External power supply

Input	230 V $\pm$ 10%, 50-60 Hz
Power consumption	max 11 W
Power consumption in standby mode	max 2 W

### General data

The model code, variant and serial number, are located on a label on the underside of the receiver.

The Viaccess Conditional Access (CA) System is embedded in 112 T and the Conax CA system in 120 T.

DC power to the Mediamaster	16 V
Operating temperature	+5°C to +45°C
Storage temperature	- 40°C to +65°C
Humidity	25 to 75% rel. humidity
Operating distance for remote control	Circa 10 m
Dimensions (w x d x h)	167 x 165 x 40 mm

Optical TOS-link connector	For PCM, DTS and Dolby Digital Bitstream audio output signals
Audio decoder	MPEG-1 layer I and II





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